

ABSTRACT

COMPARATIVE ANALYTICAL STUDY ON MANAGEMENT OF PAUWEL'S TYPE II AND III NECK OF FEMUR FRACTURE TREATED BY CANCELLOUS SCREW FIXATION ALONE VERSUS ADDITIONAL VALGUS OSTEOTOMY WITH INTERNAL FIXATION

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INTRODUCTION:

Fracture neck of femur is aptly called as “the unsolved fracture”. This is because even with so much of advances in orthopaedic field, there is no simple method of treatment which can give consistently successful results for this fracture. Management of fracture neck of femur (Pauwel's type II and III) especially in younger patients is a really demanding and challenging task for any orthopaedic surgeon.

AIM AND OBJECTIVES:

To compare the outcome on the management of neck of femur fracture (Pauwel's Type II and III) treated with cancellous screws fixation alone versus additional valgus osteotomy with internal Fixation.

MATERIALS AND METHODS:

Study conducted at the Institute of Orthopaedics and Traumatology, Madras Medical College, Chennai. Duration of study is from April 2016 - September 2016. It is both retrospective & prospective study. The total number of cases studied were 20. Cases selected based on our inclusion and exclusion criteria. 10 patients undergone fixation with cancellous screws alone and 10 patients undergone additional valgus osteotomy with internal fixation. Both groups undergo same post-operative protocol and are followed up with serial X rays. Radiological assessment done with the post-operative follow up X-rays and functional assessment with Harris hip score.

RESULTS:

We achieved union in 9 cases treated with additional valgus osteotomy and internal fixation. Union rate is 90% when compared to other group fixed with cancellous screw alone (60%). There is a statistically significant decrease in complication rate and increase in fracture union rate and functional outcome when fracture neck of femur treated with additional valgus osteotomy with internal fixation.

CONCLUSION:

For the patients under 60 years of age with fracture of the femoral neck of Pauwel's type II and II, additional valgus osteotomy produces good results in terms of fracture union and very low possibility of avascular necrosis of femoral head, whereas internal fixation alone in type II and III fractures has more failure rate for fracture union.

KEYWORDS:

Neck of femur fracture, Pauwel's type II and III, valgus osteotomy, cancellous screws, fracture union